

REMARKS

Status Of Application

Claims 20-22, 31-34, 37 and 40-51 are pending in the application; the status of the claims is as follows:

Claims 20-22, 33, 34 and 40-50 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 20-22, 33, 34, 43, 44 and 47-50 are rejected under U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,067,029 to Takahashi (hereinafter the "Takahashi patent") in view of U.S. Patent No. 5,034,804 to Sasaki et al. (hereinafter the Sasaki patent"). (Note: claims 23-30 are not currently under consideration in this application.)

Claim 34 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki patent as applied to claim 20 above, further in view of U.S. Patent No. 4,937,676 to Finelli et al. (hereinafter the "Finelli patent").

Claims 40-42, 45 and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki patent and U.S. Patent No. 4,897,732 to Kinoshita (hereinafter the "Kinoshita patent").

Claim 34 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki patent as applied to claim 20 above, further in view of the Finelli patent.

Claims 31, 37 and 51 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent No. 4,963,995 to Lang (hereinafter the "Lang patent") in view the Sasaki patent.

Claim 32 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Lang patent in view of the Sasaki patent as applied to claim 31 above, and further in view of U.S. Patent No. 5,032,927 to Watanabe et al. (hereinafter the "Watanabe patent").

35 U.S.C. § 112 Rejection

The rejection of claims 20-22, 33, 34 and 40-50 under the first paragraph of 35 U.S.C. § 112, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, is respectfully traversed based on the following.

The rejection states that "[t]he specification does not describe a second memory which receives image information from a buffer and directly receives the image information from the image pickup device." However, that is not what is claimed. For example, claim 20 states that the image information is "directed to" the second semiconductor memory, not "directly to" the second semiconductor memory. The first phrase states that the information is guided to the second semiconductor memory. (See American Heritage Dictionary, Fourth Edition at <http://www.bartleby.com/61/33/D0243300.html>.) On the other hand, the second phrase states the information is provided on a straight line or without intermediate steps. (See *Id.* at <http://www.bartleby.com/61/46/D0244600.html>.) Thus, Claim 20 states that the image information is directed to the secondary memory regardless as to whether the image information is "directly received" or "indirectly received." The rejection is based on language that is not in the claims. Applicants respectfully submit that claims 20-22, 33, 34 and 40-50 comply with 35 U.S.C. § 112.

Accordingly, it is respectfully requested that the rejection of claims 20-22, 33, 34 and 40-50 under the first paragraph of 35 U.S.C. § 112, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, be reconsidered and withdrawn.

35 U.S.C. § 103(a) Rejections

The rejection of claims 20-22, 33, 34, 43, 44 and 47-50 under 35 U.S.C. § 103(a), as being unpatentable over the Takahashi patent in view of the Sasaki patent, is respectfully traversed based on the following.

The Takahashi patent shows a digital camera 10. The digital camera 10 can store the images taken on one of the three devices: semiconductor memory 40, magnetic disk 58 or optical card 36. The data is temporarily stored in a buffer memory 18 prior to storage in one of the three devices. A switch 24 under the control of controller 20 selects which device will receive the image in accordance with instructions from the operator of the camera (column 4, lines 1-5). Of importance, magnetic disk 58 and optical card 36 are external devices, while semiconductor memory 40 is an internal device. Moreover, the Takahashi patent explains that the use of external semiconductor memory is not suitable for use with the device of the Takahashi patent (column 1, lines 19-36).

The Sasaki patent shows digital camera 10 using a removable memory card 15. Image output from the camera is transferred from image capture circuitry to buffer memory 31₆ and then transferred to memory card 15. Upon each image capture, directory information from the memory card is fetched (column 9, lines 4-15). This information is used to determine if storage space is available on memory card 15 for the captured image. If there is not sufficient space, the image is held in the buffer memory and an alarm is sounded to alert the user (column 9, lines 20-27). Once a new memory card has been inserted, the image held in the buffer memory is immediately stored in the new memory card (column 9, lines 27-28). There is no suggestion to provide permanent storage in any memory other than a memory card.

In contrast to the cited prior art, claim 20 includes

a first connection adapted to be connected to a first semiconductor memory;

a second connection adapted to be connected to a second semiconductor memory;

- a buffer memory for temporarily storing image information so that the stored image information is transmitted to said second semiconductor memory from said buffer memory;

- a recorder which stores image information, outputted from said imaging device, on one of the first semiconductor memory and the second semiconductor memory;

- a detector to detect a memory condition; and

- a changer, coupled to said detector, to selectively change between a first condition, in which image information outputted from said imaging device is directed to the first connection for storage on a connected first semiconductor memory, and a second condition, in which image information outputted from said imaging device is directed to the second connection for storage on a connected second semiconductor memory based on a detected condition by said detector.

The rejection states that a combination of the Takahashi patent and the Sasaki patent render claim 20 obvious. However, the two references cannot be combined. The Takahashi patent specifically states that removable semiconductor memories are inadequate for use with the system of the Takahashi patent (column 1, lines 19-36). Thus, the references cannot be combined as in the Office Action because the Takahashi patent specifically teaches away from the combination. MPEP §2145(X)(D)(2).

In addition, assuming for the sake of argument that the Takahashi and Sasaki patents can be combined, the combined references do not suggest "a changer ... to selectively change between a first condition, in which image information outputted from said imaging device is directed to the first connection for storage on a connected first semiconductor memory, and a second condition, in which image information outputted from said imaging device is directed to the second connection for storage on a connected second semiconductor memory based on a detected condition by said detector." The Takahashi patent shows a changer (24) that changes the device on to which an image is transferred from the buffer memory 18 based on input from the user (column 4, lines 1-5, column 5, line 51 – column 6, line 56). In the Sasaki patent, an image is held in buffer memory 31₆, rather than transferred to memory card 15 when it is detected that the memory card is full (column 9, lines 21-27). The rejection combines these two features as reading on the last element of claim 20. However, there is absolutely no suggestion to do so in the references.

As stated in the MPEP at §2142 "The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness." The succeeding section (§2143) of the MPEP then explains the requirements of a *prima facie* case for obviousness:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

With regard to the first element of the above quoted portion of MPEP §2143, the rejection does not cite any suggestion or motivation in the prior art to combine the Takahashi and Sasaki patents to provide a "changer" as claimed. Therefore, the burden of presenting a *prima facie* case for obviousness has not been met. The purpose of the suggestion requirement is to prevent hindsight analysis. "Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). It is clear from the rejection that the only suggestion to make the combination of the cited references comes from Applicant's written description. This is the essence of impermissible hindsight.

"The result is that the claims were used as a frame, and individual, naked parts of separate prior art references were employed as a mosaic to recreate a facsimile of the claimed invention. ... To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge is to fall victim to the insidious affect of hindsight syndrome wherein that which only the inventor taught is used against its teacher." *W.L. Gore & Assocs., Inc. v.*

Garlock, Inc., 721 F.2d 1540, 1552-3, 220 USPQ 303, 312-13 (Fed. Cir. 1983)

In addition, a condition where memory capacity is inadequate was discussed in the Takahashi patent (column 6, line 61 – column 7, line 3). In addition, operation of the changer based on detected signals is discussed (column 7, lines 41-48). Even though these two concepts were discussed, there is no suggestion of using the changer in conjunction with a detector to switch memories when a full condition exists. The Sasaki patent holds the image data in the buffer memory based on a full condition (column 9, lines 21-27). Similarly, there is no suggestion of using the changer in conjunction with a detector to switch memories when a memory condition is detected. "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." MPEP §2143.03. The only suggestion to provide:

a changer ... to selectively change between a first condition, in which image information outputted from said imaging device is directed to the first connection for storage on a connected first semiconductor memory, and a second condition, in which image information outputted from said imaging device is directed to the second connection for storage on a connected second semiconductor memory based on a detected condition by said detector

is found in Applicants' written description. Thus, claim 20 is not shown or suggested by the cited prior art. Thus, claim 20 is patentably distinct from the cited prior art. Claims 21, 22, 33, 34, 47 and 48 are dependent upon claim 20. "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." MPEP §2143.03. Therefore, claims 21, 22, 33, 34, 47 and 48 are also patentably distinct from the cited prior art.

Also in contrast to the cited prior art, claim 43 includes,

a changer, provided within the camera body, for causing said recording device to selectively change from a first condition, in which image information outputted from said imaging device is stored on the first SRAM memory, and a second condition, in which image information outputted from said imaging device is stored on the second SRAM memory

based on a detected condition of one of the first SRAM memory and the second SRAM memory.

As noted above, the Takahashi and Sasaki patents cannot be combined because the Takahashi patent teaches away from the combination. As also noted above, even if combined, the cited references do not show or suggest a changer that changes the destination of image data based on a detected condition of the memories. Thus, the invention of claim 43 is not shown or suggested by the cited prior art. Therefore, claim 43 is patentably distinct from the cited prior art. Claim 44 is dependent upon claim 43 and thus includes every limitation of claim 43. Therefore, claim 44 is also patentably distinct from the cited prior art.

The Office Action states that claims 49 and 50 are rejected under 35 U.S.C. §103. However, the Office Action does not provide grounds for this rejection.

In contrast to the cited prior art, claim 49 includes:

a detector to detect a memory condition;
a changer, coupled to said detector, to selectively change between a first condition, in which image information outputted from said imaging device is directed to the first connection for storage on a connected first semiconductor memory, and a second condition, in which image information outputted from said imaging device is directed to the second connection for storage on a connected second semiconductor memory based on a detected condition by said detector; ...

As noted above, this feature is not shown or suggested by the cited prior art. Therefore, claim 49 is patentably distinct from the cited prior art. Claim 50 is dependent upon claim 49, and thus includes every limitation of claim 49. Therefore, claim 50 is patentably distinct from the cited prior art.

Accordingly, it is respectfully requested that the rejection of claims 20-22, 33, 34, 43, 44 and 47-50 under 35 U.S.C. § 103(a), as being unpatentable over the Takahashi patent in view of the Sasaki patent, be reconsidered and withdrawn.

The rejection of claim 34 under 35 U.S.C. § 103(a), as being unpatentable over the Takahashi patent in view of the Sasaki patent as applied to claim 20 above, further in view of the Finelli patent, is respectfully traversed based on the following.

Claim 34 is dependent upon claim 20 and thus includes all limitations of claim 20. As demonstrated above, claim 20 is patentably distinct from the cited prior art in that the prior art does not show or suggest a "changer" having the properties stated in claim 20. The Finelli patent uses a single storage device 80, and thus does not add any additional elements to those shown in the Takahashi and Sasaki patents as explained above. Therefore, claim 34 is also patentably distinct from the cited prior art.

Accordingly, it is respectfully requested that the rejection of claim 34 under 35 U.S.C. § 103(a), as being unpatentable over the Takahashi patent in view of the Sasaki patent as applied to claim 20 above, further in view of the Finelli patent, be reconsidered and withdrawn.

The rejection of claims 40-42, 45 and 46 under 35 U.S.C. § 103(a), as being unpatentable over the Takahashi patent in view of the Sasaki patent and the Kinoshita patent, is respectfully traversed based on the following.

The Kinoshita patent shows an image capture device capable of storing an image in a frame memory 7 or on a disk recording section 2. Using a switch 11, images may be presented on a monitor 10 from the image capture CCD 4 (column 2, line 66 – column 3, line 4), the disk recording section 2 (column 3, line 67 – column 4, line 2) or the frame memory 7 (column 3, lines 5-8).

In contrast to the cited prior art, claim 40 includes:

- a first connection adapted to be connected to a first memory;
- a second connection adapted to be connected to a second memory;
- a recording device to store image information on one of the first memory and the second memory;
- a detector to detect an available memory capacity and to output a signal representative of a result of such a detection; and

a buffer memory for temporarily storing image information so that the stored image information is directed to said second memory from said buffer memory;

a first changer to selectively change between a first condition, in which image information outputted from said imaging device is directed to the first connection for storage in the first memory, and a second condition, in which image information outputted from said imaging device is directed to the second memory ...

As noted above, the Takahashi and Sasaki patents cannot be combined because the Takahashi patent teaches away from the combination. As also noted above, even if combined, the cited references do not show or suggest a changer that changes the destination of image data based on a detected condition of the memories. The Kinoshita patent adds nothing to remedy the deficiencies of the Takahashi and Sasaki patents. Therefore, claim 40 is patentably distinct from the cited prior art. Claims 41 and 42 are dependent upon claim 40 and thus include every limitation of claim 40. Therefore, claims 41 and 42 are also patentably distinct from the cited prior art

As demonstrated above, claim 43 is patentably distinct from the cited prior art. Claims 45 and 46 are dependent upon claim 43 and include all of the limitations of claim 43. The Kinoshita patent does overcome the deficiencies of the Takahashi and Sasaki patents with regard to claim 43. Therefore, claims 45 and 46 are patentably distinct from the cited prior art.

Accordingly, it is respectfully requested that the rejection of claims 40-42, 45 and 46 under 35 U.S.C. § 103(a), as being unpatentable over the Takahashi patent in view of the Sasaki patent and the Kinoshita patent, be reconsidered and withdrawn.

The rejection of claims 31, 37 and 51 under 35 U.S.C. § 103(a), as being unpatentable over the Lang patent in view of the Sasaki patent, is respectfully traversed based on the following.

The Lang patent shows a system for transferring video information (VCR-ET). Input is derived from an analog video recording unit (AVRU) 11, other analog video

sources (15, 16) or digital transmissions (17, 18). The information is converted to a digital format, if not already in digital format, and is compressed for storage on memory 13 (column 4, line 63 – column 5, line 24). Memory 13 is internal memory that may use one of several technologies (column 6, lines 8-22). Of importance, there is no suggestion that the internal memory can or should be removable. After the compressed information is stored in memory 13, a blank tape is inserted in to AVRU 11. The information in memory is then decompressed and converted to analog signals for storage in the tape in AVRU 11 (column 9, lines 23-30). In one embodiment, compressed digital information from memory 13 may be transferred to another VCR-ET via telephone lines (column 9, line 55 – column 10, line 6).

In contrast to the cited prior art, claim 31 provides,

- a first reception unit to receive a removable memory card;
- a second reception unit to receive a memory device having a relatively large capacity;
- a signal processor to decompress the compressed digital image information, stored on a memory card removably received by the first reception unit, to a decompressed digital information; and
- a recorder to record the decompressed digital image information on the memory device.

The rejection states that it would have been obvious to modify the system of the Lang patent by substituting the removable memory of the Sasaki patent for the fixed memory of the Lang patent. However, the Examiner continues to assert this combination in spite of the complete lack of suggestion of the combination. Memory 13 is solely used for intermediate storage. As shown in Figure 1 of Lang, memory 13 is completely within the case of the device contemplated in the Lang patent. It is unusual for main memory to be removable. There is absolutely no suggestion in the Lang patent that the memory 13 could be used as an image source. In addition, in the Lang patent, several storage media, including digital storage are disclosed. In spite of the existence of memory cards, as evidenced by the Sasaki patent, memory cards are never mentioned in the Lang patent. This suggests strongly that memory card storage was not considered a viable alternative.

This conclusion is buttressed by the fact that the Lang patent contemplates the storage and transfer of video information. As noted in the Lang patent, the storage needs for digital video are huge (column 5, lines 9-24). Even with compression techniques, a video requires approximately 250 megabytes of storage (column 5, line 24). The memory device of the Sasaki patent is capable of holding 256 pictures (column 8, lines 22-24). With a standard frame rate of 30 frames per second, this card would hold 8 seconds of video. The fact that the card of the Sasaki patent has the capacity of holding 8 seconds of video suggests that one skilled in the art would not have been motivated to combine to use such a card with the device of the Lang patent.

Thus, one skilled in the art at the priority date of this application would not have combined the teachings of these references as suggested in the rejection. Therefore, the combination as claimed in claim 31 is not shown nor suggested in the cited prior art. Claim 37 is dependent on claim 31. Therefore, the cited prior art does not show or suggest every element of claim 37. Thus, claims 31 and 37 are patentably distinct from the cited prior art.

Also in contrast to the cited prior art, claim 51 provides:

receiving image information from a memory card received within the first reception unit;
restoring received image information to original image information originally obtained in a photographing operation; and
recording restored image information on a memory device received within the second reception unit.

Claim 51 is a method using a device as in claim 34. As noted above, the cited prior art does not show or suggest the structure of claim 34. Therefore, the cited prior art cannot show or suggest a method using the structure of claim 34. Thus, claim 51 is patentably distinct from the cited prior art.

Accordingly, it is respectfully requested that the rejection of claims 31, 37 and 51 under 35 U.S.C. § 103(a), as being unpatentable over the Lang patent in view of the Sasaki patent, be reconsidered and withdrawn.

The rejection of claim 32 under 35 U.S.C. § 103(a), as being unpatentable over the Lang patent in view of the Sasaki patent as applied to claim 31 above, and further in view of the Watanabe patent, is respectfully traversed based on the following.

Claim 32 is dependent upon claim 31. As noted above, the memory card of the Sasaki patent cannot properly be combined with the device of the Lang patent because such a combination is not technically feasible and there is no suggestion to do so in the cited prior art. The Watanabe patent does nothing to overcome this deficiency in these patents as prior art references cited against claim 31. Because claim 32 includes every limitation of claim 31, claim 32 is patentably distinct over the cited prior art.

Accordingly, it is respectfully requested that the rejection of claim 32 under 35 U.S.C. § 103(a), as being unpatentable over the Lang patent in view of the Sasaki patent as applied to claim 31 above, and further in view of the Watanabe patent, be reconsidered and withdrawn.

CONCLUSION


Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

The following is a marked-up version of the changes to the claims which are being made in the attached response to the Office Action dated December 5, 2001.

IN THE CLAIMS:

20. (Eight Times Amended) A camera comprising:
a camera body;
an imaging device to conduct a photographing operation, wherein following a photographing operation said imaging device outputs image information;
a first connection adapted to be connected to a first semiconductor memory;
a second connection adapted to be connected to a second semiconductor memory;
a buffer memory for temporarily storing image information so that the stored image information is transmitted to said second semiconductor memory from said buffer memory;
a recorder which stores image information, [output] outputted from said imaging device, on one of the first semiconductor memory and the second semiconductor memory;
a detector to detect a memory condition; and
a changer, coupled to said detector, to selectively change between a first condition, in which image information outputted from said imaging device is directed to the first connection for storage on a connected first semiconductor memory, and a second condition, in which image information outputted from said imaging device is directed to the second connection for storage on a connected second semiconductor memory based on a detected condition by said detector.

49. (Twice Amended) A camera comprising:
a camera body;
an imaging device to conduct a photographing operation, wherein following a photographing operation said imaging device outputs image information;

a first connection adapted to be connected to a first semiconductor memory;
a second connection adapted to be connected to a second semiconductor memory;
a buffer memory for temporarily storing image information so that the stored image information is transmitted to said second semiconductor memory from said buffer memory;

a recorder which stores image information, [output] outputted from said imaging device, on one of the first semiconductor memory and the second semiconductor memory;

a detector to detect a memory condition; [and]

a changer, coupled to said detector, to selectively change between a first condition, in which image information outputted from said imaging device is directed to the first connection for storage on a connected first semiconductor memory, and a second condition, in which image information outputted from said imaging device is directed to the second connection for storage on a connected second semiconductor memory based on a detected condition by said detector; and

an alarm mechanism to alert a user of a detected memory condition.